

JAMES SCHROEDER

NIH-Oxford Scholar 2006

Degrees: Stanford University, B.S., Biology and M.S., Engineering, 2005

Research Interests: Metabolism, Energetics and Cardiovascular Disease



Jamie Schroeder graduated from Stanford University in 2005 with a Bachelor of Science in Biology and a Master of Science in Bioengineering. His academic awards at Stanford include the Stanford University Scholar Athlete Honor Roll, the Stanford University Dean's Award for Academic Accomplishment and the Stanford University Donald Kennedy Award for outstanding contribution to the university in academic, athletics and community service. Jamie first became interested in magnetic resonance while shadowing Dr. Robert Hu, a cardiologist with the Stanford Magnetic Resonance Systems Research Laboratory. Jamie observed that his combined interests in medicine and technology intersected in the development of new imaging technologies that would clarify cardiac pathologies while simultaneously assisting with diagnosis and treatment. Not long after, Jamie initiated an independent research project with Professor Garry Gold. He studied methods for intramyocellular and extramyocellular lipid quantification in order to do non-invasive muscle spectroscopy at 3.0 Tesla. Over the past year, Jamie has continued this study at the Oxford Centre for Clinical Magnetic Resonance where he has been able to apply these methods with a much larger number of subjects. While at Oxford, Jamie also spent time working on chemical shift imaging methods for cardiac energetics studies. This work led to a contribution to the International Society of Magnetic Resonance in Medicine on which Jamie is first author. Outside of the lab, Jamie is a world-class athlete. Although he did not take up rowing until his freshman year at college, Jamie competed on the 2004 United States Olympic Rowing Team, placing tenth of fifteen in the four-man boat at the Olympic Games in Athens. As part of the 2002 U.S. National Rowing Team, Jamie took home a gold medal in the eight-man boat. In the future, Jamie seeks to pioneer new uses of spectroscopic and fluorescence imaging to quantify metabolism in vivo.